UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/815,074	03/31/2004	Stephen R. Lawrence	24207-10081	7346

62296   7590   06/12/2008
GOOGLE / FENWICK
SILICON VALLEY CENTER
801 CALIFORNIA ST.
MOUNTAIN VIEW, CA 94041

EXAMINER
TIMBLIN, ROBERT M

ART UNIT	PAPER NUMBER
2167	

MAIL DATE	DELIVERY MODE
06/12/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/815,074	LAWRENCE ET AL.
	Examiner	Art Unit
	ROBERT TIMBLIN	2167

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 March 2008*.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-28* is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *1-28* is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some * c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This Office Action corresponds to application 10/815,074 and Applicant's remarks/amendments made thereto submitted on 3/14/2008.

Response to Amendments

Claims 1, 13, 14, 18-20, and 22-28 have been amended. Claims 1-28 have been examined and are pending prosecution.

Claim Objections

Claim 1 is objected to because it is unclear if the query in the "determining a search query..." step is meant to determining a search query of the plurality of search queries in the first step. Claims 18 and 25 are similarly objected to. Clarification is respectfully requested.

Claims 25-28 are objected to because the language "configured for" should be "configured to" as to recite positive language in the claim.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 18-21 are rejected under 35 U.S.C. 101 because they are directed towards non statutory subject matter. Specifically, the computer-readable medium defined therein may be comprised of non statutory subject matter. In particular, the medium may comprise a wireless transmission medium which can be seen as signals carrying instructions. As current, such embodiments of a medium are nonstatutory as they are not one of the enumerated classes of invention (i.e. being a composition of matter, machine, process, or product).

Claims 25-28 are rejected under 35 U.S.C. 101 because it is directed towards a system containing modules for performing processes. In other words, the modules can be interpreted as software modules and thus leading the claims to be software per se. Software per se is merely functional descriptive material, which is not statutory in accordance with MPEP 2106.01.

If Applicant intends the system in these claims to be a hardware system (a machine) then there needs to be some form of hardware defined in the claims as to construct a statutory machine system.

If Applicant intends the system in these claims to be a software system, the system then needs to be stored upon a statutory medium (e.g. memory) as to impart functionality in a computer.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-15, 18-20, and 22-28 are rejected under 35 U.S.C. 102(e) as being

anticipated by Barrett et al. ('Barrett' hereafter) (U.S. Patent Application 2003/0135490).

Barrett teaches the claims in the following drawing references of figures 1-2 and the

following cited paragraphs.

With respect to claim 1, A computer-implemented method for ranking information,

comprising:

determining a first ranking sequence of a collection of information (0010; i.e. a

request is made against an existing index of the collection of information. Search

results indicative of information are returned to the user based on ranking associated

with the index. Also, Barrett teaches original rankings to describe a first ranking

sequence) including information retrieved from query results for a plurality of search

queries (0037; e.g. the system may be used by a query family to suggest multiple

queries);

presenting the collection of information to a user according to the first ranking sequence (0010; i.e. presenting results based upon original rankings;

identifying an input signal from the user (drawing reference 12) indicating an interest (figure 22, drawing reference 8 and 0012; i.e. a user selects information that satisfies their needs) in a first piece of information (drawing reference 8; i.e. a first information is selected) in the collection of information (figure 2, information A-B);

determining a search query (figure 1, drawing reference 2 and figure 2; e.g. Q1) associated with a query result including the first piece of information (step 2, figure 1);

adjusting a query factor (figure 1, drawing reference 16, and paragraphs 0017-0023; i.e. factors calculated for the Enhanced Popularity Score (EPS)) associated with the search query (figure 2; i.e. the factors are calculated for the EPS which is given to a query; 0043) responsive to the input signal (drawing reference 12);

locating a second piece of information in the query result of the search query (drawing reference 12; i.e. user selects another information from the results);

determining a score (EPS, 0047) for the second piece of information (step 14, figure 1) based at least in part on the query factor (figure 1, drawing reference 16, and paragraphs 0017-0023; i.e. factors calculated for the Enhanced Popularity Score (EPS)) associated with the search query (figure 1, drawing reference 2 and figure 2; e.g. Q1);

determining a second ranking sequence (0005, last 5 lines of 0038; i.e. the adjusting of final result rankings, and 0045 describes a ranking other than the original ranking) of the collection of information based at least in part on the score (figure 1, step 20 and figure 2); and

presenting the collection of information to the user according to the second ranking sequence (0010; i.e. results are returned to the user based upon the index (which has matured (0045) over the ranking process.

With respect to claim 2, Barrett teaches the method of claim 1, wherein the input signal indicates a selection of the first piece of information (0004).

With respect to claim 3, Barrett teaches the method of claim 1, wherein the input signal comprises lack of selection of the first piece of information for at least a specified amount of time where the first piece of information is displayed to the user (0012, step 16).

With respect to claim 4, Barrett teaches the method of claim 1, wherein the input signal comprises user activity associated with the first piece of information (0004, user clicking).

With respect to claim 5, Barrett the method of claim 4, wherein the user activity comprises one or more of viewing duration, scrolling, mouse movement, selection of links from the piece of information, saving, printing, and bookmarking (0012, step 16).

With respect to claim 6, Barrett teaches the method of claim 4, wherein the input signal further comprises user activity associated with articles linked from the first piece of information (0012, step 12 and figure 1).

With respect to claim 7, Barrett teaches the method of claim 1, wherein the input signal comprises selecting a user interface object associated with negative interest in the first piece of information (0004, clicking a link).

With respect to claim 8, Barrett teaches the method of claim 1, wherein the input signal comprises a user rating (0005 use rate and 0037 feedback).

With respect to claim 9, Barrett teaches the method of claim 1, wherein one of the plurality of search queries comprises one of query type, query term, application, type of application, article type, and event type (0010, 0013, and 0037).

With respect to claim 10, Barrett teaches the method of claim 9, wherein the query type comprises one of current sentence, current paragraph, text near the cursor, extracted terms, and identified entries (0010).

With respect to claim 11, Barrett teaches the method of claim 1, wherein the score comprises a relevance score (0013).

With respect to claim 12, Barrett teaches the method of claim 1, wherein the score comprises a popularity score (0043, EPS).

With respect to claim 13, Barrett teaches the method of claim 1, further comprising increasing a refresh rate of a display (0016-0019 and 0053) of the collection of information to the user responsive to receiving input signals at increasing frequency (0039).

With respect to claim 14, Barrett teaches the method of claim 1, wherein the input signal is a first input signal and the interest is a first interest, further comprising:

receiving a second input signal indicating a second interest in a third piece of information (0012, figure 1, selecting more information); and

varying a refresh rate of a display of the collection of information to the user (0004) based at least in part on the duration between receiving the first input signal and the second input signal (0053, clicking behavior).

With respect to claim 15, Barrett teaches the method of claim 1, wherein the input signal comprises multiple input signals (0041, tracking clicks).

With respect to claim 18, (Currently Amended) A computer program product having a computer-readable medium having computer program instructions tangibly

embodied thereon for ranking information, the computer program instructions comprising instructions for:

determining a first ranking sequence of a collection of information (0010; i.e. a request is made against an existing index of the collection of information. Search results indicative of information are returned to the user based on ranking associated with the index. Also, Barrett teaches original rankings to describe a first ranking sequence) including information retrieved from query results for a plurality of search queries (0037; e.g. the system may be used by a query family to suggest multiple queries);

presenting the collection of information to a user according to the first ranking sequence (0010; i.e. presenting results based upon original rankings;

identifying an input signal from the user (drawing reference 12) indicating an interest (figure 22, drawing reference 8 and 0012; i.e. a user selects information that satisfies their needs) in a first piece of information (drawing reference 8; i.e. a first information is selected) in the collection of information (figure 2, information A-B)'

determining a search query (figure 1, drawing reference 2 and figure 2; e.g. Q1) associated with a query result including the first piece of information (step 2, figure 1);

locating a second piece of information in the query result of the search query (drawing reference 12; i.e. user selects another information from the results);

adjusting a query factor (figure 1, drawing reference 16, and paragraphs 0017-0023; i.e. factors calculated for the Enhanced Popularity Score (EPS)) responsive to the input signal (drawing reference 12);

determining a search query (figure 1, drawing reference 2 and figure 2; e.g. Q1) associated with a second piece of information (figure 1, step 12; i.e. a second information is selected) from the collection (figure 2);

determining a score (EPS, 0047) for the second piece of information (step 12, figure 1) based at least in part on the query factor (figure 1, drawing reference 16, and paragraphs 0017-0023; i.e. factors calculated for the Enhanced Popularity Score (EPS)) associated with the search query (figure 1, drawing reference 2 and figure 2; e.g. Q1);

determining a second ranking sequence (0005, last 5 lines of 0038; i.e. the adjusting of final result rankings, and 0045 describes a ranking other than the original ranking) of the collection of information based at least in part on the score (figure 1, step 20 and figure 2); and

presenting the collection of information to the user according to the second ranking sequence (0010; i.e. results are returned to the user based upon the index (which has matured (0045) over the ranking process.

With respect to claim 19, Barrett teaches the computer program product of claim 18, the computer program instructions further comprising instructions for increasing a refresh rate of a display (0016-0019 and 0053) of the collection of information to the user responsive to receiving input signals at a increasing frequency (0039).

With respect to claim 20, Barrett teaches the computer program product of claim 18, the computer program wherein the input signal is a first input signal and the interest is a first interest the computer program instructions further comprising instructions for:

receiving a second input signal indicating a second interest in a third piece of information (0012, figure 1, selecting more information); and

varying a refresh rate of a display of the collection of information to the user (0004) based at least in part on the duration between receiving the first input signal and the second input signal (0053, clicking behavior).

With respect to claim 22, Barrett teaches the method of claim 1, wherein determining the second ranking sequence comprises:

determining the second ranking sequence (0005, last 5 lines of 0038; i.e. the adjusting of final result rankings, and 0045 describes a ranking other than the original ranking) of at least some of the collection of information based at least in part on the score, the at least some of the collection of information associated with at least two search queries (0037; e.g. the system may be used by a query family to suggest multiple queries).

With respect to claim 23, the method of claim 1, further comprising:

generating the plurality of search queries (0037, query family); and

adding information from results of the plurality of search queries into the collection of information (figure 2).

With respect to claim 24, Barrett teaches the computer program product of claim

18, the computer program instructions further comprising instructions for

generating the plurality of search queries (0037; e.g. the system may be used by

a query family to suggest multiple queries); and

adding information from results of the plurality of search queries into the

collection of information (0049).

With respect to claim 25, A query system for ranking information comprising:

a module configured for determining a first ranking sequence of a collection of

information (0010; i.e. a request is made against an existing index of the collection of

information. Search results indicative of information are returned to the user based on

ranking associated with the index. Also, Barrett teaches original rankings to describe a

first ranking sequence) including information retrieved from query results for a plurality

of search queries (0037; e.g. the system may be used by a query family to suggest

multiple queries);

a module configured for presenting the collection of information to a user

according to the first ranking sequence (0010; i.e. presenting results based upon

original rankings;

a module configured for identifying an input signal from the user (drawing

reference 12) indicating an interest (figure 22, drawing reference 8 and 0012; i.e. a user

selects information that satisfies their needs) in a first piece of information (drawing

reference 8; i.e. a first information is selected) in the collection of information (figure 2,

information A-B);

a module (drawing reference 10) configured for determining a search query

(figure 1, drawing reference 2 and figure 2; e.g. Q1) associated with the first piece of

information (step 2, figure 1);

a module (drawing reference 14) configured for adjusting a query factor (figure 1,

drawing reference 16, and paragraphs 0017-0023; i.e. factors calculated for the

Enhanced Popularity Score (EPS)) responsive to the input signal (drawing reference

12);

a module (drawing reference 12) configured for locating a second piece of

information in the query result of the search query (drawing reference 12; i.e. user

selects another information from the results);

a module configured for determining a score (EPS, 0047) for the second piece of

information (step 12, figure 1) based at least in part on the query factor (figure 1,

drawing reference 16, and paragraphs 0017-0023; i.e. factors calculated for the

Enhanced Popularity Score (EPS)) associated with the search query (figure 1, drawing

reference 2 and figure 2; e.g. Q1);

a module configured determining a second ranking sequence (0005, last 5 lines

of 0038; i.e. the adjusting of final result rankings, and 0045 describes a ranking other

than the original ranking) of the collection of information based at least in part on the

score (figure 1, step 20 and figure 2); and

a module (drawing reference 6) configured for presenting the collection of information to the user according to the second ranking sequence (0010; i.e. results are returned to the user based upon the index (which has matured (0045) over the ranking process.

With respect to claim 26, Barrett teaches the query system of claim 25, the computer further comprising:

a module (drawing reference 2) configured for receiving a user input (0047); and

a module configured (drawing reference 6) for generating the plurality of search queries based on the user input (0043 and 0047).

With respect to claim 27, the query system of claim 25, further comprising a module configured for increasing a refresh rate of a display of the collection of information to the user (0004) responsive to receiving input signals (drawing reference 12) at a increasing frequency.

With respect to claim 28, the method of claim 1, wherein ranking the collection of information based on the score further comprises:

a module (12) configured for receiving a second input signal (drawing reference 12) indicating a second interest in a third piece of information; and

a module configured for varying a refresh rate of a display of the collection of

information to the user (0004)   based at least in part on the duration between receiving

the first input signal and the second input signal (0053, clicking behavior).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 16, 17, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Barrett as applied to claims 1-15, 18-20, and 22-28 above in view of Corston-

Oliver et al. ("Corston-Oliver" hereafter) U.S. Patent 6,295,529 B1).

With respect to claim 16 and similar claim 21, Barrett teaches

generating the plurality of search queries based on a plurality of data streams;

executing the plurality of search queries (0003, line 2) for search results (figure 1,

step 6); and

combining the search results to generate the collection of information (figure 1,

step 18).

Barrett, does not explicitly teach generating the plurality of search queries based

on a plurality of data streams;

Corston-Oliver, however, teaches generating the plurality of search queries based on a plurality of data streams (col. 1, lines 50-55, col. 4 lines 25-34) for an implicit data request.

In the same field of endeavor, (i.e. information retrieval), it would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because Corston-Oliver would have provided Barrett's system with expanded query defining capabilities for the benefit of not limiting a user to use one type of query. Corston-Oliver further would have given Barrett more efficient searching techniques for searching against a large index (i.e. Corston-Oliver at col. 2 line 50-54).

With respect to claim 17, Corston-Oliver teaches the method of claim 16, wherein the plurality of data streams comprise a data stream describing current contextual state of a user (col. 4 lines 25-34; i.e. a "FIND SAME" request).

Response to Arguments

Applicant's arguments filed in the reply dated 3/14/2008 have been fully considered but they are not persuasive.

Applicant argues (page 11 of the reply) that Barrett does not disclose "determining a second ranking sequence of the collection of information based at least in part on the score. Applicant further argues that Barrett does not rerank a query result

based on user responses to the query result. The Examiner respectfully disagrees given the following:

The Examiner submits that Barrett teaches an index of a collection of information. The index contains original rankings and the search retrieves results that are ranked according to those rankings (Barrett, paragraph 0010). Barrett further teaches that the query results are ranked based upon a popularity score (e.g. Barrett, 0041 and 0045) that is calculated, at least in part on a user's behavior and interaction with the result (e.g. a user selecting the result, drawing reference 12). Accordingly, the results presented to a user are based upon their score in the index.

The Examiner submits that Barrett discloses the "reranking" of search results in that in the process of refining the relevancy of search results (0013, Barrett), results are given an original ranking (i.e. a first ranking sequence). As results of the index mature and gain (or lose popularity) the results essentially shift ranking (e.g. last 5 lines of 0039). This is also exemplified in drawing reference 14 of figure 2 wherein a first piece of information associated with a query is selected and then demoted with a negative score when a second piece of information is selected. The Examiner submits that with the results being displayed according to an original score, and then again displayed according to a modified (popularity) score, that the reranking aspect of the present invention is disclosed.

Applicant also argues (page 11, last 3 lines of the reply) that Barrett does not disclose information retrieved from query results for a plurality of search queries. The

Examiner disagrees and submits that Barrett discloses the use of a query family (0037)

which is a grouping of queries to retrieve information. As another example of Barrett

teaching this feature, figure 2 also shows a plurality of queries (e.g. Q1-Q4) with

respective search results. For example, all queries Q1-Q4 contain information A (as

well as B-C as a result). Therefore, the Examiner maintains that Barrett teaches this

feature.

On a further note, in light of the new grounds of rejection under 35 U.S.C. 101 for

claims 18-21, this Office Action is herein non-final.

Contact Information

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Robert M. Timblin whose telephone number is 571-272-

5627. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John R. Cottingham can be reached on 571-272-7079. The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ROBERT TIMBLIN/

Examiner, Art Unit 2167

/John R. Cottingham/

Supervisory Patent Examiner, Art Unit 2167